Miami Dade College
SCHOOL OF EDUCATION

EWC 4013: Teaching with AI: Designing Human-Centered Classrooms
Credit Hours: Three (3)

Course Description

This course invites learners to explore the integration of artificial intelligence through a pedagogical lens, where technology serves as a tool for reimagining teaching and learning. Learners will critically engage with AI tools by grounding their use in learning theory and evidence-based design practices. Through inquiry, collaboration, and hands-on experimentation, learners will examine how AI can amplify creativity, personalize learning, and promote human-centeredness.

Course Competencies

Upon completion of this course, the learner will demonstrate theoretical and pedagogical knowledge by:

Competency 1: Contextualizing foundational understandings of AI concepts and literacy by:

1. Accessing and using generative AI tools that support lesson planning, student engagement, and productivity
2. Explaining how AI tools are trained, including how data misinformation and bias may affect outputs
3. Practicing and refining prompting strategies (such as Chain-of-Thought and end-goal prompting) for diverse academic and instructional contexts using pedagogically, evidence-based frameworks (e.g., TILT, UDL)
4. Identifying widely used AI platforms and trends shaping PK–12 instruction and school operations
5. Developing or adapting AI how-to resources that ensure students and colleagues have access and understanding

Competency 2: Critically analyzing various AI tools through an ethical lens for their educational value, usability, and alignment with curriculum standards by:

1. Evaluating the effectiveness and limitations (including bias, deepfakes, and hallucinations) of AI tools used in education
2. Identifying accessibility issues and proposing solutions to improve usability
3. Mapping tools to specific curriculum standards and learning objectives
4. Comparing and critiquing tools to determine ethical implications, basic functions, generated output, and relevance for multiple educational purposes using established frameworks (e.g., 4Cs of AI Literacy, TPACK)
5. Formulating a personal stance on responsible AI integration that ensures AI tools complement rather than replace essential teaching and learning processes

Competency 3: Creating AI-assisted and enhanced learning experiences that personalize instruction, foster critical thinking, promote creativity, and strengthen home-school connections by:

1. Developing effective communication plans and artifacts tailored for families, ensuring clarity, accessibility, and engagement to support student learning and collaboration
2. Exploring and comparing AI tools that support collaboration and creativity, allowing students to co-create, share, and receive feedback in dynamic, student-driven environments
3. Embedding adaptive AI tools into lessons that adjust content, process, and products based on individual student needs, ensuring all learners are challenged, engaged, and supported
4. Incorporating case studies and real-world scenarios that allow students to analyze, evaluate, and apply knowledge in creative, meaningful ways

Competency 4: Engaging in human-centered reflection on how AI is reshaping teaching methodologies, student learning, and professional development by:

1. Evaluating personal shifts in their instructional practices, learning, and efficacy
2. Examining how personal values, decisions, and experiences shape the use of AI in education
3. Reflecting on AI tools to generate original ideas, explore multiple perspectives, and approach complex problems with curiosity and open-mindedness
4. Analyzing and evaluating how the tools disrupt and support traditional teaching and learning experiences
5. Reimagining learning tasks beyond content production, using AI to foster creativity and deepen critical thinking
6. Reflecting on their own learning journey with AI (including challenges, discoveries, and evolving perspectives)